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**ABSTRACT****A semiconductor device and a method of manufacturing a semiconductor device**

A semiconductor device comprises an active region (4), a cladding layer (5,7), and a saturable absorbing layer (6) disposed within the cladding layer. The saturable absorbing layer comprises at least one portion (11a) that is absorbing for light emitted by the active region and comprises at least portion (11b) that is not absorbing for light emitted by the active region.

The fabrication method of the invention enables the non-absorbing portion(s) (11b) of the saturable absorbing layer (6) to be produced after the device structure has been fabricated. This allows the degree of overlap between the non-absorbing portion(s) (11b) of the saturable absorbing layer (6) and the optical mode of the laser to be altered after the device has been grown.

[Figs 4(a), 4(b), 4(c)]